



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,627	03/15/2002	Berthier Lemieux	324-010889-US (PAR)	2243
2512	7590	07/27/2005	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			AHN, SAM K	
			ART UNIT	PAPER NUMBER
			2637	
DATE MAILED: 07/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/099,627	LEMIEUX, BERTHIER	
	Examiner	Art Unit	
	Sam K. Ahn	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>730,617</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The elements in Figs. 2 and 6 need to have descriptive label, in conformance with 37 CFR 1.84(n) and 1.84(o). For example, a descriptive label of "Bit Re-ordering" should be inserted into 200 of Fig.2 to properly describe element.

Specification

2. The abstract of the disclosure is objected to because it is not necessary to place the figure number in the abstract. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 9-11 and 13 are objected to because of the following informalities:

In claim 9, line 2, delete "which testing" and insert "which the testing".

In claim 13, line 3, delete "the first" and insert "a first".

Claims 10 and 11 are directly depending on claim 9. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2637

4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 9 recite the limitation "the received inband data" in lines 13 and 9, respectively. There is insufficient antecedent basis for this limitation in the claim. Is the "received inband data" based on the "at least the part of the inband data" transmitted back to the testing apparatus? Is it receiving "part of the inband data" or is it receiving "the inband data"? It is unclear and indefinite for not particularly pointing out what the "received inband data" is referring to. Claims 2-8, 10 and 11 directly or indirectly depend on claim 1 or 9.

In claim 6, line 2, recites "... according to the GSM system", which appears to be referring to a GSM standard. Which version is it referring to?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 12 is rejected under 35 U.S.C. 102(e) as being anticipated by Kleider et al.
USP 6,240,282 B1 (Kleider).

Regarding claim 12, Kleider teaches a receiver (see path of 216 in Fig.13) for receiving test data comprising channel coded parameters (BER, RATE) and inband data from a testing apparatus (114), a decoder (228,230,232) for decoding the test data, extracting means (SNR, RATE from 220) for extracting at least part of the inband data from the decoded test data. Kleider further teaches a transmitter (antenna coupled to 236 through 318 in Fig.13) for transmitting at least a part of the inband data back to the testing apparatus (114).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1,3,4,7,9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molinari et al, USP 6,308,065 B1 (Molinari) in view of DeJaco USP 6,205,130 B1.

Regarding claims 1 and 9, Molinari teaches a method and an apparatus for determining the performance of a decoder, which testing apparatus is arranged to be functionally connected to the decoder, the testing apparatus comprising:
a composing means (10 in Fig.7, further shown in Fig.2) for composing test data (see 200 in Fig.6 and note col.9, lines 64-67), a transmitter (55 in Fig.2) for

transmitting the test data to the decoder for decoding (202 in Fig.6 and note col.11, lines 13-25), a receiver (50 in Fig.2) for receiving at least part of the inband data (208 in Fig.6), and a comparator (54 in Fig.2) for determining the performance of decoding by comparing the transmitted inband data and the received inband data (208,210,212 in Fig.6 and note col.10, lines 44-47).

Although Molinari teaches wherein the received information regarding the received test data comprises information from a control channel (inband data) and voice channel (note col.10, lines 19-27), Molinari does not explicitly teach wherein the test data comprises channel coded parameters.

DeJaco teaches transmission of channel coded parameters (encoded speech parameters, note col.1, lines 24-30 and col.5, lines 22-24) for testing. Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the teaching of DeJaco in the test data of Molinari by including the channel coded parameters in the test data for the purpose of testing whether the received decoded speech parameters meet within a predetermined acceptable range, as taught by DeJaco (note col.5, lines 50-55).

Regarding claims 3 and 10, Molinari in view of DeJaco teach all subject matter claimed as applied to claim 1 or 9. Molinari further teach transmitting the test data in the voice (or traffic channel, note col.10, lines 20-27), and transmitting the test data from the testing apparatus to the decoder in the downlink traffic channel and from the decoder to the testing apparatus in the uplink traffic channel (between 14 and 15

in Fig.1 or between 14 and 42 in Fig.7), Molinari does not explicitly teach activating a traffic channel before transmitting the test data.

However, it would have been obvious to one skilled in the art at the time of the invention to active the traffic channel prior to the transmission of the test data for the purpose of properly transmitting the test data, otherwise, the traffic channel which may be in use or is disabled, may not transmit the test data and resulting in as an error in testing.

Regarding claim 4, Molinari in view of DeJaco teach all subject matter claimed as applied to claim 3. Although Molinari further teaches transmitting the inband data back (Fixed Link Signal) to the testing apparatus (10 in Fig.7), Molinari does not explicitly teach transmitting back in a first available uplink traffic channel time frame. However, it would have been obvious to one skilled in the art at the time of the invention to implement as such for the purpose of expediting the computation of testing results by transmitting in a traffic channel upon availability.

Regarding claim 7, Molinari in view of DeJaco teach all subject matter claimed as applied to claim 1. DeJaco further teaches wherein the channel coded parameters are speech parameters (note col.5, lines 50-55).

Art Unit: 2637

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molinari et al, USP 6,308,065 B1 (Molinari) in view of DeJaco USP 6,205,130 B1 and Arunachalam et al., USP 6,631,122 B1 (Arunachalam).

Regarding claim 2, Molinari in view of DeJaco teach all subject matter claimed as applied to claim 1. However, Molinari in view of DeJaco do not explicitly teach bypassing a link adaptation process of the decoder prior to transmitting at least the part of the inband data back to the testing apparatus.

Arunachalam teaches link adaptation comprising a function of controlling coding techniques (note col.12, lines 47-53).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to bypass the link adaptation processing function, prior to transmitting the test data back to the testing apparatus, for the purpose of preventing from modifying the test data, thus correctly transmit information back to the testing apparatus of Molinari. The link adaptation processing function may modify the test data by controlling the coding function, prior to the transmission back to the testing apparatus, thus by bypassing the link adaptation process, only the unmodified by the link adaptation test data may be received.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molinari et al, USP 6,308,065 B1 (Molinari) in view of DeJaco USP 6,205,130 B1 and Su et al. USP 6,493,665 B1 (Su).

Art Unit: 2637

Regarding claim 8, Molinari in view of DeJaco teach all subject matter claimed, as applied to claim 1. Although Molinari in view of DeJaco teach determining the performance of channel decoding, Molinari in view of DeJaco does not explicitly teach mode indication inband data field in AMR full-rate or half-rate speech channel.

Su teaches AMR codec having adaptive speech and channel codec capable of operating at full-rate and half-rate (note col.42, lines 52-57). By applying the AMR codec, as taught by Su, in 41 of Fig.7 of Molinari, in order to provide an adaptive rate codec in the system of Molinari, it would have been obvious to one skilled in the art at the time of the invention to incorporate the mode indication inband data field during the testing of codec of Molinari for the purpose of properly testing codec with a predetermined parameters.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kleider et al. USP 6,240,282 B1 (Kleider).

Regarding claim 13, Kleider teach all subject matter claimed as applied to claim 12. Although Kleider teaches the inband data is arranged to be transmitted back to the testing apparatus in an uplink traffic (318 in Fig.13, note col.21, lines 3-7), and does not explicitly teach transmitting back in a first available uplink traffic channel time frame, it would have been obvious to one skilled in the art at the time of the invention to implement as such for the purpose of expediting the computation of testing results by transmitting in a traffic channel upon availability.

Allowable Subject Matter

10. Claims 5,6 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and overcome the 112,2nd paragraph rejection.

11. The following is a statement of reasons for the indication of allowable subject matter:

Present application discloses a method and an apparatus to test a codec by transmitting and receiving a test data. Closest prior arts, Molinari and DeJaco teach all subject matter claimed. However, prior art does not teach the further limitation of transmitting CLOSE_TCH_LOOP_CMD message to activate a test loop in the decoder, which test loop is functionally connected with the decoder, and further acknowledging the message in response to the channel being activated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn

TEMESSU
PRIMAR
W 5/20/05
SAE